Docket No.: 4576/4581A(CON)/ENG0012-00

U.S. Pat. Appl'n No. 10/612,658

LISTING OF CLAIMS

1. (Currently amended) A conformable catalyst member comprising a refractory metal

pliable carrier comprising a tube of corrugated construction, the tube having an elongate

body portion which is dimensioned and configured to be mounted in a curved or bent

configuration along its length within a bent or curved portion of an exhaust pipe having

an open discharge end, the pliable carrier having coated thereon an intermetallic anchor

layer having a catalytic coating applied thereto which remains intact on the carrier when

the earrier conformable catalyst member is bent along its length and mounted within a

bent or curved portion of an exhaust pipe.

2. (Previously presented) The catalyst member of claim 1 having a plurality of

perforations formed around the periphery of the tube.

3. (Previously presented) The catalyst member of claim 1 having a catalytic coating on

the anchor layer to provide a conformable catalyst member.

4. (Cancelled)

5. (Previously presented) The catalyst member of claim 1, wherein the tube of corrugated

construction comprises alternating rings separated by annular webs.

6. (Previously presented) The catalyst member of claim 1 wherein the anchor layer is

electric arc sprayed.

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7. - 29. (Cancelled)

30. (Previously presented) The catalyst member of claim 1 wherein the intermetallic anchor layer is selected from the group consisting of nickel, Ni/Cr/Al/Y, Co/Cr/Al/Y, Fe/Cr/Al/Y, Co/Ni/Cr/Al/Y, Fe/Ni/Cr, Fe/Cr/Al, Ni/Cr, Ni/Al, 300 series stainless steels,

400 series stainless steels. Fe/Cr and Co/Cr, and mixtures of two or more thereof.

31. (Previously presented) The catalyst member of claim 1, the carrier having a distal end and a proximal end, the proximal end comprising a mounting member dimensioned and configured to be secured to the open discharge end of the pipe when the body portion of the carrier is disposed within the pipe.

32. (Previously presented) The catalyst member of claim 31 wherein the mounting member comprises an annular collar defining a mounting flange which is disposed radially outwardly of the proximal end of the catalyst member and extends in the direction from the proximal end towards the distal end thereof, whereby to define between the mounting flange and the proximal end of the catalyst member an annular slot which is dimensioned and configured to receive therein the open discharge end of the

pipe, when the body portion of the carrier is disposed within the pipe.

33. (Previously presented) The catalyst member of claim 32 having a catalytic material coated on at least some of the body portion of the carrier.

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34. (Currently amended) A catalyst member for treating noxious components of engine exhaust gas comprising a <u>pliable</u> refractory metal carrier comprising a plurality of perforated plate members having opposite faces and disposed in a face-to-face linear array to impart a cylindrical shape having a length to the carrier and to form accordion pleats, the plate members having protrusions extending from their faces which space adjacent plate members from each other, the carrier having coated thereon an intermetallic anchor layer and a catalytic coating, the catalyst member being conformable along its length-so-that-it-can-be such that when placed in a bent or curved configuration to provide intimate contact of the exhaust gas with the catalytic coating of conformable catalyst member to promote reactions to convert noxious components of the exhaust gas, and retain the catalytic coating remains intact on the carrier.

35. (Previously presented) The catalyst member of claim 34, wherein the intermetallic anchor layer is selected from the group consisting of nickel, Ni/Cr/Al/Y, Co/Cr/Al/Y, Fe/Cr/Al/Y, Fe/Cr/Al/Y, Fe/Cr/Al, Ni/Cr, Ni/Al, 300 series stainless steels, 400 series stainless steels. Fe/Cr and Co/Cr, and mixtures of two or more thereof.

36. (Cancelled)

37. (New) A catalytic assembly comprising the conformable catalyst member of claim 1 disposed within a bent or curved portion of an exhaust pipe having an open discharge end.

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38. (New) The catalytic assembly of claim 37, wherein the intermetallic anchor layer is

electric arc sprayed.

39. (New) The catalytic assembly of claim 37, wherein the intermetallic anchor layer is

selected from the group consisting of nickel, Ni/Cr/Al/Y, Co/Cr/Al/Y, Fe/Cr/Al/Y,

Co/Ni/Cr/Al/Y, Fe/Ni/Cr, Fe/Cr/Al, Ni/Cr, Ni/Al, 300 series stainless steels, 400 series

stainless steels, Fe/Cr and Co/Cr, and mixtures of two or more thereof.

40. (New) The catalytic assembly of claim 37, the carrier having a distal end and a

proximal end, the proximal end comprising a mounting member dimensioned and

configured to be secured to the open discharge end of the exhaust pipe when the body

portion of the carrier is disposed within the exhaust pipe.

41. (New) The catalytic assembly of claim 40, wherein the mounting member comprises

an annular collar defining a mounting flange which is disposed radially outwardly of the

proximal end of the catalyst member and extends in the direction from the proximal end

towards the distal end thereof, whereby to define between the mounting flange and the

proximal end of the catalyst member an annular slot which is dimensioned and

configured to receive therein the open discharge end of the exhaust pipe, when the body

portion of the carrier is disposed within the exhaust pipe.

42. (New) The catalytic assembly of claim 37, having a plurality of perforations formed

around the periphery of the carrier tube.

43. (New) The catalytic assembly of claim 42, wherein the conformable catalyst member comprises a plurality of interior closures to prevent passage of exhaust therethrough and force passage of the exhaust out through the carrier tube perforations, and wherein the exhaust pipe comprises a series of interior annular baffles to prevent passage of exhaust therethrough and force passage of the exhaust in through the carrier tube perforations.